PERSEIDS—COMET DANIEL.

On the night of August 4 several bright Perseids were observed, and this marked return of the shower at so early a date presages a display exceeding the ordinary richness this year. There is evidence that the shower is pretty strong every ten years, for there were considerable numbers of Perseids seen in 1877, 1887, and 1897. It will be desirable to watch the phenomenon during its ensuing apparition, with special regard to the fact alluded to, and to ascertain the hourly number of Perseids visible throughout the nights of Sunday and Monday, August 11 and 12. The latter date will probably be found to represent the time of maximum. St. Lawrence's Day, August 10, is no longer contemporary with the Perseid display at its best.

The diurnal motion of the radiant, amounting to one degree in a direction to E.N.E., was first definitely observed by the writer in 1877 and announced in Nature at the time. Every year supplies fresh evidence of the displacement and corroborates the facts described in Monthly Notices, vol. lxii., pp. 161–9.

Daniel's comet has been visible to the naked eye since the first few days of July, and is now sufficiently conspicuous to arrest the immediate attention of anyone who will look towards the eastern sky before the morning twilight becomes too strong. On August 5, at 3 a.m., the nucleus of the comet appeared like a blurred star of 2½ magnitude, and the tail extended westwards over nearly 3°, but it was difficult to assign limits, as it faded gradually away into the tone of the sky. Ephemeris by Dybeck (*Ast. Nach.*, 4194):—

Berlin Mean Midnight.

1907	R.A. h. m. s.	Dec. ° ′	Brightness.
Aug. 10	5 56 56	+17 23	17·6
„ 14	6 33 1	+17 15	19·0
„ 18	7 7 6	+16 47	20·0
„ 22	7 39 2	+16 4	21·0
„ 26	8 8 58	+15 11	20·5
„ 30	8 37 12	+14 9	20·0
Sept. 1	8 50 45	+13 35	19·5

W. F. Denning.

THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The seventy-fifth annual meeting of the British Medical Association was held last week at Exeter under the presidency of Dr. Henry Davy, physician to the Royal Devon and Exeter Hospital.

The subject of the presidential address was "Science in its Application to National Health." After giving some particulars concerning Exeter and the Royal Devon Hospital, Dr. Davy proceeded to point out that every organ, muscle, and structure in the body required a proper amount of work to keep it healthy. Exercise was therefore very important, and he deplored the present tendency to watch games rather than to participate in them. Physical culture was one of the most pressing questions of the day, and it should not be left to professors of Swedish exercises to lecture on physical culture and to direct the kind of exercise to be employed; in such questions the medical man should be consulted. Schools should have proper playgrounds and gymnasiums, and trainers in physical exercises were as necessary as school teachers. The question of food was another important one, and the "man in the street" should be able to obtain from his medical attendant precise details of the quantity required and of its nature. As regards infective diseases, pyæmia was now almost unknown, thanks to the labours of Lord Lister, typhoid fever was diminishing, and it was now tuberculosis that required to be attacked. Something, it was true, had been done in this direction, but much more remained; are no precautions to be insisted on with regard to disinfection? Are we for ever to allow consumptives to disseminate their infectious expectoration? Are consumptives alone to be allowed to stay in hotels and lodgings without taking precautions?

The address in medicine was delivered by Dr. Hale White, whose subject was "A Plea for Accuracy of Thought in Medicine." He instanced such terms as "irregular" or "suppressed gout" and "liver out of order" as really being only a cloak for ignorance, which it would be much better to confess. "Selective action" was another mystery, *e.g.* why does alcohol pick out the anterior tibial nerve and lead the musculo-spiral? Why do beer drinkers get "beer-drinkers' heart" in Munich but not in London? Unreflecting adhesion to authority has a particularly serious effect in keeping back the advent of correct knowledge.

Mr. Butlin discussed the "Contagion of Cancer in Human Beings: Autoinoculation" in his address in surgery. He brought forward a number of cases in which cancer in a part was followed by cancer of the same type in another part in contact with the first, *e.g.* cancer in one lip followed by cancer in the other lip.

In the section of medicine there was a discussion on the indications for operation in cases of intra-cranial tumour introduced by Dr. Risien Russell, Dr. Gardner Robb read a paper on the recent outbreak of cerebro-spinal fever in Belfast, and Dr. Rivière one on the tuberculin treatment of tuberculosis in children.

In the section of pathology there were important discussions on pernicious anæmia and on phagocytosis. In the section of tropical diseases, Prof. Simpson read a paper on anti-malarial sanitation, in which he discussed how recent discoveries have rendered anti-malarial sanitation more precise and less costly than formerly.

In the section of State medicine, Dr. Newsholme delivered an address on the need for coordination of the public medical services. Voluntary effort, as illustrated in the hospitals, and State-aided treatment under the Poor Law, failed entirely to produce an adequate result for the vast sums expended. A coordinated system of State-paid and State-directed medical service would speedily justify itself from an economical standpoint, and must of necessity ally itself with preventive medicine.

Dr. Gilchrist read a paper on the necessity of increasing the degree of immunity against small-pox, and Mr. Garrett Horder one on the new vaccination order. A resolution was passed by the meeting recommending the council of the association to approach the Local Government Board on the subject of the new vaccination order.

The association was received by the civic authorities at the Guildhall, and numerous garden-parties and excursions helped to pass an instructive and pleasant week in the delightful old city.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

Manchester.—Harling fellowships in physics have been awarded to Mr. J. N. Pring and Dr. Hans Geiger.

The University has made arrangements for a number of public lectures in the autumn which are to be given by leading men of science and others.

Dr. Graham Steell has been appointed by the council of the University of Manchester professor of medicine in the university.

Oxford.—The Romanes lecture will be delivered by Lord Curzon, Chancellor of the University, in the Sheldonian Theatre, on Saturday, November 2. The subject of the lecture will be "Frontiers."

Sheffield.—Mr. D. H. de Souza has been appointed demonstrator in physiology, and Mr. W. F. G. Swann assistant lecturer and demonstrator in physics

Prof. von Leyden has resigned the professorship of clinical medicine at the University of Berlin, and Prof. His, of Göttingen, has been appointed to succeed him in the chair.

Dr. Geoffrey Martin, a former student of the Merchant Venturers' Technical College, Bristol, has been appointed lecturer and demonstrator in chemistry at University College, Nottingham.

A "Prof. Tait's Memorial Fund" of the value of 200*l.* per annum, for the encouragement of physical research in the University of Edinburgh, has been endowed by Sir John Jackson.

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Two research studentships in science of the value of [illegible]0*l.* and 40*l.* respectively have been founded at University College, London, by an anonymous donor; they will be awarded for the first time next session.

A MOVEMENT is on foot in Glasgow to recognise in a suitable manner the scientific services of Prof. J. G. McKendrick, F.R.S., and a committee of former pupils and friends has been formed to raise a memorial to the late Prof. Pirie, Aberdeen.

MR. W. E. CURNOCK has been appointed head of the department of mechanical engineering and building trades at the Battersea Polytechnic. Mr. Curnock has for the past three years been head of the engineering department of the Technical College, Huddersfield.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, July 29.—M. A. Chauveau in the chair.—New contribution to the study of the trypanosomiasis of the Upper Niger: A. **Laveran.** An account of a new trypanosome to which the name *T. soudanense* has been given. This parasite, from a morphological point of view, resembles *T. evansi*, but differs from it in its pathogenic action on animals, especially mice. Experimental evidence is given that the trypanosome of Mal de la Zousfana and El Dabab is probably *T. soudanense.*—The function of the spleen in trypanosomiasis: A. **Laveran** and M. **Thiroux.** A criticism of a paper on the same subject by MM. Rodet and Vallet. The latter regard the spleen as possessing trypanolytic properties, but this view is disputed by the authors of the present note.—The early diagnosis of tuberculosis by the ophthalmo-reaction with tuberculin: A. **Calmette.** This reaction, as applied by the author, consists in the application to the eye of a 1 per cent. solution of dry tuberculin precipitated by alcohol. In healthy subjects no reaction is produced, but in tuberculous subjects a characteristic conjunctival redness is produced within twenty-four hours. This reaction has been utilised in nearly a thousand cases with very satisfactory results, and in many instances, especially of children, has revealed tuberculous lesions the presence of which had not been suspected.—Mr. E. C. Pickering was elected a correspondant for the section of astronomy, in the place of the late M. Rayet.—A point in the theory of the sun of M. Julius: Henri **Bourget.**—Linear homogeneous representations of finite groups: M. **de Séguier.**—Differential equations of the third order with fixed critical points: M. **Chazy.**—Differential equations of the third order the integral of which is uniform: René **Garnier.**—The representation of integral equations of any degree: J. **Massau.**—The determination of the altitude of the summit of Aconcagua: Fr. **Schrader.** The mean of two observations was 6953 metres. Full details are given of the method used.—Ionisation by bubbling through liquids: L. **Bloch.** A question of priority regarding a recent note by M. de Broglie.—The compressibility of gases in the neighbourhood of atmospheric pressure: Daniel **Berthelot.** The variation of pv with the pressure has been studied for carbon dioxide, nitrous oxide, and sulphur dioxide for pressures between 0·25 and 2·0 atmospheres. Between these limits of pressure the variation of pv is not, as has been assumed by M. Guye, a linear function of the pressure, but is a linear function of the density.—Nitrate of silver: calorimetry at high temperatures: M. **Guinchant.** The calorimeter is isolated by a vacuum jacket, and heated electrically. It has been applied to measure directly the latent heats of fusion of tin, mercuric iodide, and silver nitrate.—Ortho- and pyro-arsenic acids: E. **Baud.** Pure pyroarsenic acid can be obtained by keeping $As_2O_5.4H_2O$ over strong sulphuric acid at a temperature of 15° C. to 20° C. From thermochemical experiments the author concludes that orthoarsenic acid exists only in solution. The crystals which separate from this solution are the hydrate of pyroarsenic acid.—The direct oxidation of phosphorus: E. **Jungfleisch.** A detailed study of the combustion of phosphorus in oxygen at low pressures, phosphorus anhydride being formed. Under special conditions as much as 95 per cent. of the phosphorus can be converted into P_4O_6.—The properties and constitution of tantalum steels: Léon **Guillet.** Four samples of steel were prepared containing about 0·17 per cent. of carbon, 0·2 per cent. of manganese, 0·2 per cent. of silicon, and proportions of tantalum varying from 0·09 per cent. to 1·05 per cent. These steels were studied micrographically and as regards their mechanical properties. Contrary to what has been claimed for these steels, they show no property of any importance.—Some derivatives of menthone: Eyvind **Bœdtker.**—Two new glucosides, linarine and pectolinarine: T. **Klobb.** These are obtained from the flowers and leaves of *Linaria vulgaris.*—The production of high temperatures in laboratory researches: Léon **Guillet.** Reclamation of priority against M. Chabrié.—The mode of distribution of the muscular glycogen in well fed and in starved subjects. The influence of the seasons on the proportion of glycogen in the muscles: F. **Maignon.**—The relative toxicity of the salts of chromium, aluminium, and magnesium; comparison with the analogous properties of the rare earths: Alexandre **Hébert.**—The influence of acids on the action of laccase: Gabriel **Bertrand.**—The influence of manganese salts on alcoholic yeasts: E. **Kayser** and H. **Marchand.**—The urinary chromogen resulting from the administration of indol-carboxylic acid: Ch. **Porcher** and Ch. **Hervieux.**—The dwarf coffee plant of Sassandra, *Coffea humilis*: Aug. **Chevalier.**—The buccal incubation in *Arius fissus*: Jacques **Pellegrin.**—*Coccus anomalus* and the disease causing the blueing of champagnes: E. **Manceau.**—The pharmacodynamical action of kolatine: J. **Chevalier** and A. **Goris.**—Some ophthalmological experiments made with the aid of a mercury vapour lamp: P. **Fortin.** Certain details of structure very difficult to observe with ordinary light are readily perceived by the light of a Cooper-Hewitt lamp. This light is also very useful in the study of colour blindness.—The discovery of the sulpho-gypsum formation in the basin of Seybouse: J. Dareste **de la Chavanne.**—The fishes of the family of Cichlideæ found in the Tertiary strata at Guelma: H. E. **Sauvage.**

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